

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14 (Cancelled)

15. (Previously presented) A method of coding an image, comprising:

- coding a foreground image;
- coding a background image as a plurality of image coefficients;
- canceling any image coefficients associated with spatial areas occupied by the foreground image;
- reconstructing image data in a background image area and in the foreground image area based on the remaining coefficients;
- correcting the image data in the background image area;
- coding the corrected reconstructed image data as a second plurality of image coefficients;
- canceling any second image coefficients associated with spatial areas occupied by the foreground image area; and
- including remaining second image coefficients in an output signal.

16. (Previously presented) The method of claim 15, further comprising, prior to the including step, correcting the remaining second image coefficients according to the background image data.

17-19. (Cancelled)

20. (Currently Amended) A method for coding a data signal representing partially-masked image data, comprising:

generating coefficients representing spatial areas of the image data,

canceling coefficients of masked image data,

reconstructing image data based on coefficients of non-masked image data,

for any portion of the reconstructed image data that lies outside of the mask, substituting the original image data therefor, and

repeating the generating, canceling, reconstructing and substituting steps at least once unless convergence is reached; ~~and~~

~~outputting the coefficients as the coded image data.~~

21. (Previously presented) A method for coding a data signal representing partially-masked image data, comprising:

coding the image data as transform coefficients in a plurality of stages, performed from a finest scale to a coarsest scale, the coding for at least one stage comprising:

filtering the image data at a resolution corresponding to the scale of the instant stage,

generating transform coefficients representative of the filtered image data, the transform coefficients associated with the scale of the instant stage,

canceling transform coefficients associated with image data located below a mask,

reconstructing image data based on the remaining coefficients,

for any portion of the reconstructed image data located outside of the mask, substituting original image data therefor, and

repeating the generating and canceling steps at least once unless the reconstructed image data converges to the original image data outside of the mask; and

outputting the unaltered transform coefficients from each stage as the coded data signal.

22. (Previously presented) The method of claim 21, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

23. (Previously presented) A method of coding a data signal representing partially-masked image data, comprising:

initializing reconstructed image data to the image data; and for at least one iteration:

generating transform coefficients representative of the reconstructed image data,

identifying transform coefficients associated with image data below the mask,

for each identified transform coefficient w , modifying the coefficient by $w' = w(1 - \gamma)$,

where γ is an overshoot factor having a value from 0 to 2,

reconstructing image data from the modified transform coefficients and the unaltered transform coefficients, and

for any portion of the reconstructed image data x'_i that differs from a

corresponding portion of the image data x_i , setting the reconstructed image data to

$x'_i = (1 + \gamma) x_i$.

24. (Previously presented) The coded data signal of claim 23, wherein the transform coefficients are wavelet coefficients obtained by wavelet coding.

25. (Previously presented) The coded data signal of claim 23, wherein $\gamma = 1.5$.

26. (currently amended) A method of coding a data signal representing partially-masked image data converging on a predetermined accuracy after a number of iterations proportional to a number of masked pixels, comprising:

generating coefficients representing spatial areas of the image data;
canceling coefficients of masked image data; ~~;~~
reconstructing image data based on coefficients of non-masked image data;
for any portion of the reconstructed image data that lies outside of the mask, substituting the original image data therefore; and
repeating the generating, canceling, reconstructing and substituting steps at least once unless convergence is reached; ~~and~~
~~outputting the coefficients as the coded image data.~~

27. (Previously presented) The method of claim 26, wherein the number of iterations until convergence is further divided by three.

28. (cancelled)

29. (New) A coder that codes a data signal representing partially-masked image data, the coder comprising:

a module configured to generate coefficients representing spatial areas of the image data;
a module configured to cancel coefficients of masked image data;
a module configured to reconstruct image data based on coefficients of non-masked image data;
a module configured to, for any portion of the reconstructed image data that lies outside of the mask, substitute the original image data therefore;

a module configured to repeat the generating, canceling, reconstructing and substituting steps at least once unless convergence is reached; and

a module configured to output coded image data based on the convergence.

30. (New) A coder that codes a data signal representing partially-masked image data, the coder comprising:

a module configured to initialize reconstructed image data to the image data, and, for at least one iteration, to perform the steps of:

generating transform coefficients representative of the reconstructed image data;

identifying transform coefficients associated with image data below the mask;

for each identified transform coefficient w , modifying the coefficient by $w' = w(1 - \gamma)$, where γ is an overshoot factor having a value from 0 to 2;

reconstructing image data from the modified transform coefficients and the unaltered transform coefficients; and

for any portion of the reconstructed image data x'_i that differs from a corresponding portion of the image data x_i , setting the reconstructed image data to $x'_i = (1 + \gamma) x_i$.

31. (New) A coder that codes a data signal representing partially-masked image data, the coder comprising:

a module configured to code the image data as transform coefficients in a plurality of stages, performed from a finest scale to a coarsest scale, the coding for at least one stage comprising:

filtering the image data at a resolution corresponding to the scale of the instant stage,

generating transform coefficients representative of the filtered image data, the transform coefficients associated with the scale of the instant stage,

canceling transform coefficients associated with image data located below a mask,

reconstructing image data based on the remaining coefficients,

for any portion of the reconstructed image data located outside of the mask, substituting original image data therefor, and

repeating the generating and canceling steps at least once unless the reconstructed image data converges to the original image data outside of the mask; and

a module that outputs the unaltered transform coefficients from each stage as the coded data signal.